

19, 21, 22 October 2010
Convention on Biological Diversity-CoP10 event

TRAFFIC seminar on Medicinal and Aromatic Plants

Presentation

発表資料

Saving Plants that Save Lives

地球の薬箱を救え！

Presenter: Liu Xueyan(TRAFFIC)

Towards a sustainable livelihood with wild medicinal resources:

Economic aspects of harvesting and trading in
two medicinal species in China's Upper Yangtze Ecoregion



(c) Liu Xueyan

Liu Xueyan
TRAFFIC CBD CoP-10 Side Event
Nagoya, Japan

The Target Species for Study-Cordyceps



- The species is found in alpine and grassland ecosystems between the altitudes of 3000 and 5000m
- Beside TAR, Cordyceps is arduously harvested in the Dolpo region of Nepal, Sikkim and Uttaranchal regions of India, and Northern Bhutan

- Chinese Caterpillar Fungus *Cordyceps sinensis*
- As “Magic grass” is a popular status symbol for the wealthy Chinese consumer
- Treatment of various ailments
- Cordyceps (USD 44-80/gram) is more expensive than gold (USD 43.71/gram)
- Big economic and social impact on local communities



Geographic range of *Cordyceps sinensis* (Source Winkler 2009)

The Target Species for Study-Schisandra



(c) Liu Xueyan

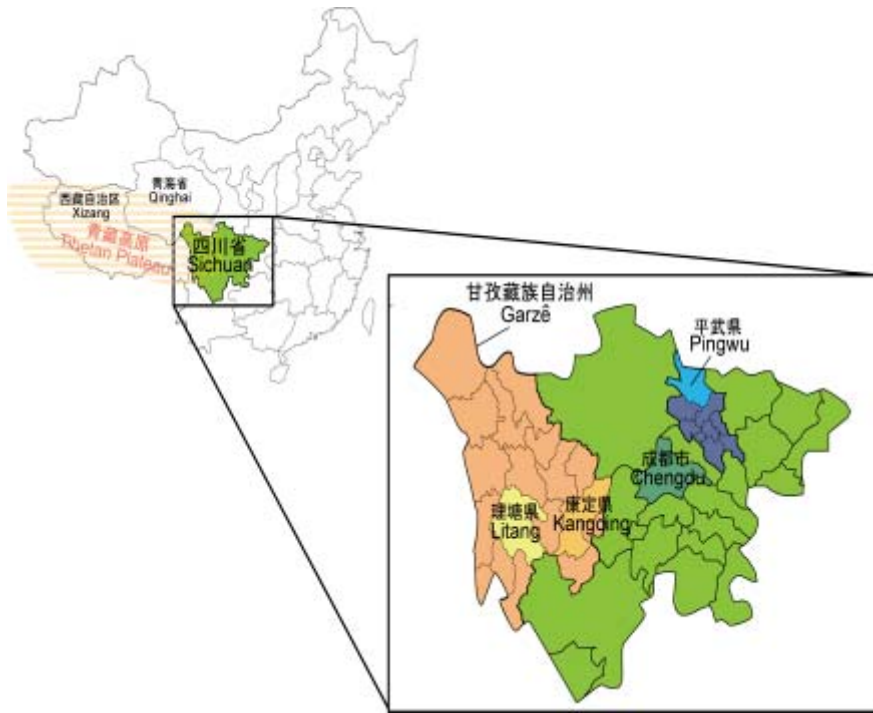
- Low price with CNY 8 to CNY12 (USD 0.88 to USD 1.76)/ kg.
- Abundant natural resource in the wild
- Mainly distributed in the southwest and mid-south area
- Small economic and social impacts on local communities

- There are 29 species in China but only The Fructus schisandra chinensis (*Wuweizi*) and Fructus Schisandra sphenanthera (*Nanwuweizi*) are recorded in Pharmacopeia
- Traditionally used as nutritional tonic

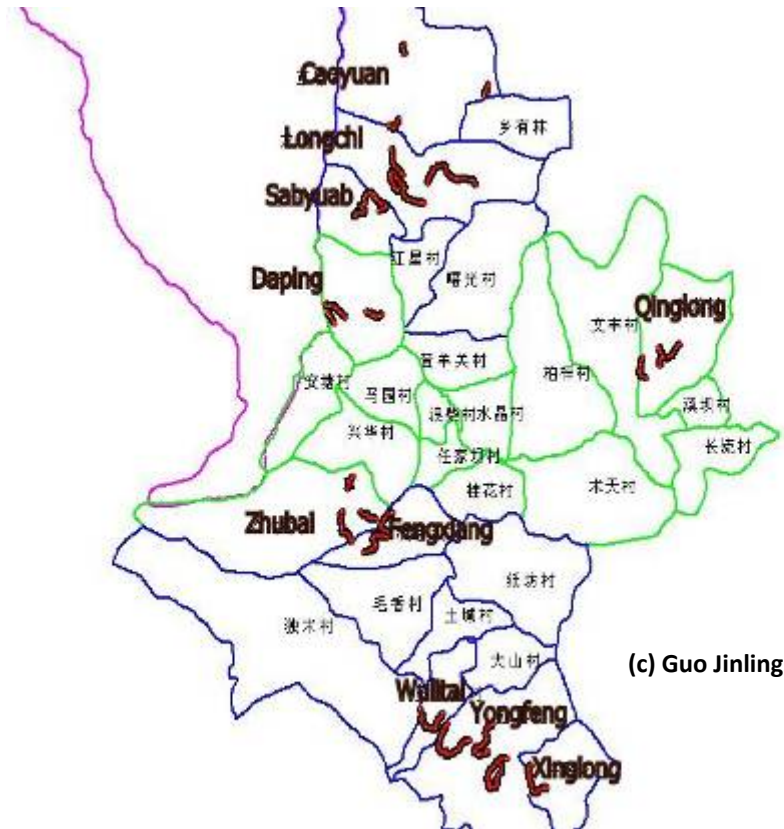


The Schisandra and Kadsura genus distribution in China

Research Area



(c) Nishino, R. / TRAFFIC East Asia - Japan



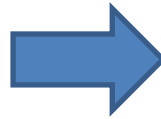
(c) Guo Jinling

- Cordyceps – Litang and Kangding County
- Schisandra - 10 villages in Pingwu county

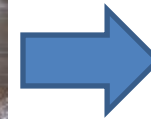
Trade flow- Cordyceps



Harvesters



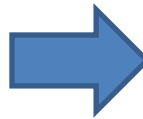
Middleman to cleaning and sorting



Local flow market or tourist shop



Re-sorting and package for value adding by shop owners

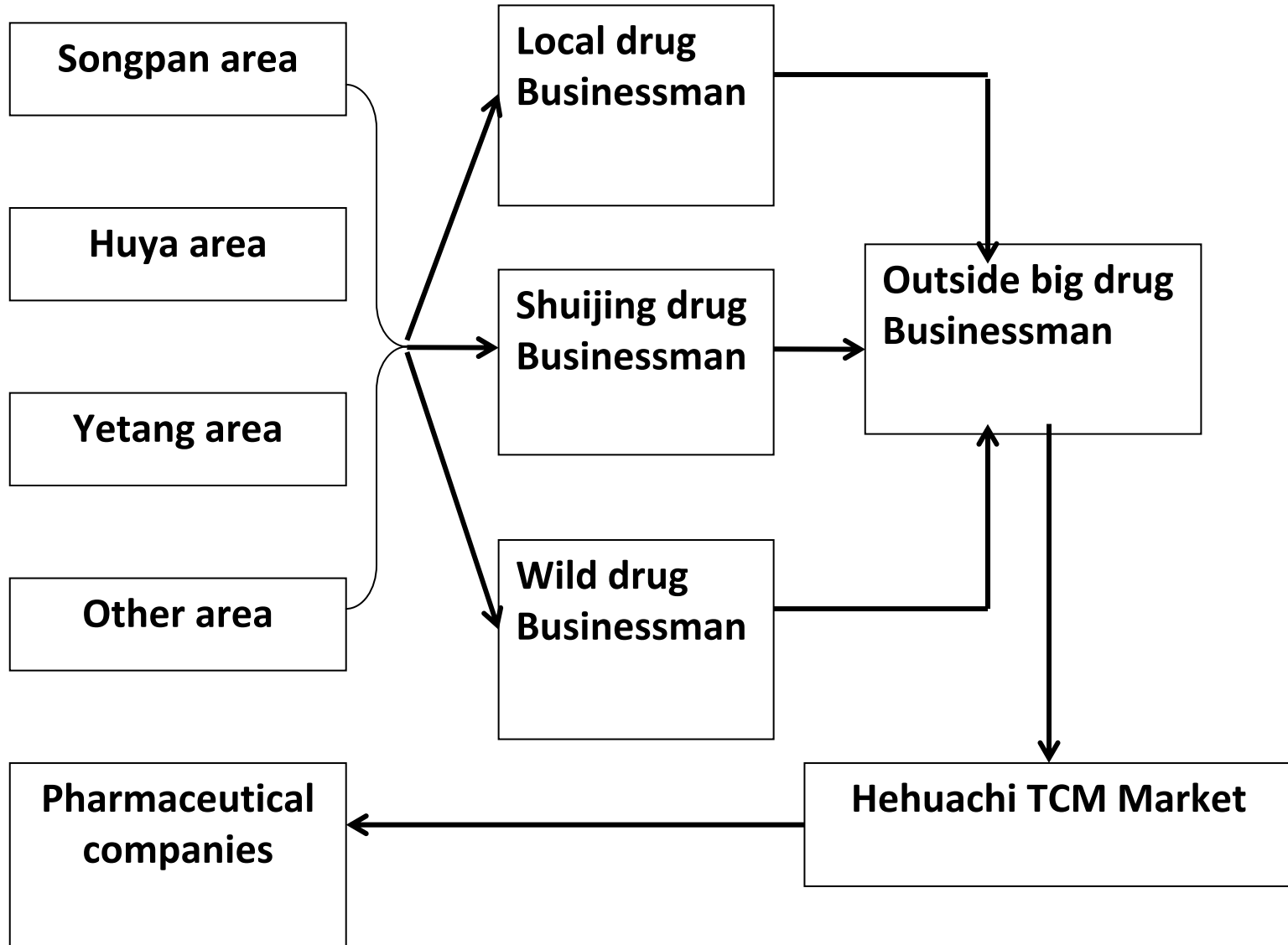


Regional and national level TCM market



The end consumers market

Trade Flow-Schisandra



Market volume and revenue

Estimated Cordyceps market volume and revenue

Item	Volume/Revenue
Kangding county volume	2,5 tons
Litang county volume	22,05 tons
Ganzi Prefecture total volume	225 tons
Kangding county revenue	CNY 82 million (USD 11 million)
Litang county revenue	CNY 512,5 million (USD 73,6 million)
Ganzi Prefecture total revenue estimate	CNY 3,9 billion (USD 0,593 billion)

Estimated Schisandra market volume and revenue

In Sichuan province, estimated 20,000 tons of *S. sphenanthera*, producing dried fruits weighing 3000-4000 tons and worth USD7.5-10.4 million (CNY45-70 million)

Economic and social impacts-Cordyceps

- In Kanding and Litang Cordyceps harvest provides for 50-100% of income of local and indigenous harvesters

Kangding village collection volume and revenue from Cordyceps

Village	Avg. daily collection (pcs)	Avg. yearly collection (kg)	Avg. yearly revenue (RMB)
Laoyuling village (about 400 villagers)	2,000-3,000	32-40	0.8 million-1.2 million
Xinyulin village (about 400 villagers)	1,600-2,000	25-30	0.64 million-0.8 million
Sandaoqiao village (about 900 villagers)	4,000-5,000	45-65	1.6 million-2 million
Kangding County (estimate)	180,000-230,000	2,000-3,000	72 million-92 million

Economic and social impacts-Schisandra



(c) WWF/Xi'an

Household income from medicinal plants harvesting of Daping village (incl. Schisandra)

Category (Yuan/year)	< 2500	2500- 5000	5000- 7500	7500- 10000	> 10000
Households (household)	1	3	7	6	7
Percentage of total households	4.5 %	12.5 %	29%	25%	29%

- Low price and value bring the low economic and social impacts
- Through field survey, income from Schisandra is only accounting for 5% of whole household

Model for Schisandra management

- Change model of Schisandra harvesting and trade through value addition
- With support of EU-China biodiversity programme (ECBP) by WWF, IUCN,TRAFFIC
- Principles of sustainable wild collection introduced (FairWild Standard) in cooperation with local farmer association
- Higher prices received from international buyer – raising income of harvesters
- Opportunity for other low priced medicinal plants species – for income growth, wild resources conservation

Conclusions

- With current demand for wild medicinal ingredients increasing, growing need for **understanding of value of wild resources** for local livelihoods and traditional knowledge
- Survival of species, habitats, and livelihoods is only possible if **sustainable resource management practices are followed**

Recommendations

- Raising awareness and training
- Scientific survey for a resource management plan
- Communication and transparency along the trade chain
- Local empowerment
- Species conservation
- Development of policies and regulatory frameworks
- Streamlining the complexity of trade
- Adopting the appropriate standard for harvesting and trade (e.g. FairWild Standard)

Thinking.....a sustainable way for our treasure from
planet!
Thanks!

